We claim:

1. A targeting construct comprising:
   (a) a first polynucleotide sequence homologous to a DEZ receptor gene;
   (b) a second polynucleotide sequence homologous to the DEZ receptor gene; and
   (c) a selectable marker.
2. The targeting construct of claim 1, wherein the targeting construct further comprises a screening marker.
3. A method of producing a targeting construct, the method comprising:
   (a) providing a first polynucleotide sequence homologous to a DEZ receptor gene;
   (b) providing a second polynucleotide sequence homologous to the DEZ receptor gene;
   (c) providing a selectable marker; and
   (d) inserting the first sequence, second sequence, and selectable marker into a vector, to produce the targeting construct.
4. A method of producing a targeting construct, the method comprising:
   (a) providing a polynucleotide comprising a first sequence homologous to a first region of a DEZ receptor gene and a second sequence homologous to a second region of a DEZ receptor gene; and
   (b) inserting a positive selection marker between the first and second sequences to form the targeting construct.
5. A cell comprising a disruption in a DEZ receptor gene.
6. The cell of claim 5, wherein the cell is a murine cell.
7. The cell of claim 6, wherein the murine cell is an embryonic stem cell.
8. A non-human transgenic animal comprising a disruption in a DEZ receptor gene.
9. A cell derived from the non-human transgenic animal of claim 8.
10. A method of producing a transgenic mouse comprising a disruption in a DEZ receptor gene, the method comprising:
    (a) introducing the targeting construct of claim 1 into a cell;
    (b) introducing the cell into a blastocyst;

(c) implanting the resulting blastocyst into a pseudopregnant mouse, wherein said pseudopregnant mouse gives birth to a chimeric mouse; and

(d) breeding the chimeric mouse to produce the transgenic mouse.

11. A method of identifying an agent that modulates the expression of a DEZ receptor, the method comprising:

(a) providing a non-human transgenic animal comprising a disruption in a DEZ receptor gene;

(b) administering an agent to the non-human transgenic animal; and

(c) determining whether the expression of DEZ receptor in the non-human transgenic animal is modulated.

12. A method of identifying an agent that modulates the function of a DEZ receptor, the method comprising:

(a) providing a non-human transgenic animal comprising a disruption in a DEZ receptor gene;

(b) administering an agent to the non-human transgenic animal; and

(c) determining whether the function of the disrupted DEZ receptor gene in the non-human transgenic animal is modulated.

13. A method of identifying an agent that modulates the expression of DEZ receptor, the method comprising:

(a) providing a cell comprising a disruption in a DEZ receptor gene;

(b) contacting the cell with an agent; and

(c) determining whether expression of the DEZ receptor is modulated.

14. A method of identifying an agent that modulates the function of a DEZ receptor gene, the method comprising:

(a) providing a cell comprising a disruption in a DEZ receptor gene;

(b) contacting the cell with an agent; and

(c) determining whether the function of the DEZ receptor gene is modulated.

15. The method of claim 13 or claim 14, wherein the cell is derived from the non-human transgenic animal of claim 8.

16. An agent identified by the method of claim 11, claim 12, claim 13, or claim 14.

17. A transgenic mouse comprising a homozygous disruption in a gene comprising SEQ ID NO:1, or a homolog thereof.

18. The transgenic mouse of claim 17, wherein the transgenic mouse exhibits decreased agility or coordination relative to a wild-type control mouse.

19. The transgenic mouse of claim 18, wherein the decreased agility or coordination is characterized by decreased latency in an accelerating rotarod test.

20. Phenotypic data associated with the transgenic mouse of claim 17, wherein the phenotypic data is in a database

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